

ABSTRACT OF THE DISCLOSURE

A method, apparatus, and system for providing a power monitoring service to an electric power consumer at a power consumer site involves providing a monitoring unit at the power consumer site with connections to probes on individual power distribution circuits emanating from a power distribution and control panel of the consumer site. The monitoring unit measures a power consumption of each of the power distribution circuits using the probes, and communicates power consumption data related to the respective power distribution circuits to a power monitoring server that collects and analyzes the power consumption data. The power monitoring server has a circuit description table that identifies each of the power distribution circuits to permit detailed billing to the power consumer. The monitoring server also uses per-circuit information relating to many power consumers to compute at least one aggregate power consumption profile.